

AMENDMENTS TO THE CLAIMS

Listing of Claims:

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims in the application.

Please cancel claims 1-6, 12 and 18, amend claims 7, 9 and 13, and add new claims 19-24 as follows:

Claims 1-6. (Cancelled)

1 7. (Currently Amended) A helical implant, comprising a core surrounded by helical
2 threads, [[and]] said helical threads comprised of inclined flanks of said threads bearing
3 ~~continuous~~ a continuum of micro-patterns increasing exposed surface area of said ~~implant~~ helical
4 thread.

1 8. (Previously Presented) The helical implant of claim 7, comprised of the micro-patterns
2 having a polygonal cross-section opened at one side thereof.

1 9. (Currently Amended) A helical implant of claim 7, comprised of the micro-patterns
2 comprising one or more recesses incised into said helical threads and protrusions projecting from
3 said helical threads.

1 10. (Previously Presented) The helical implant as set forth in claim 7, comprised of the
2 micro-patterns comprising one or more recesses and protrusions with both the recesses and
3 protrusions having an arcuate cross section of identical curvature and length.

1 11. (Previously Presented) The helical implant as set forth in claim 7, comprised of the
2 micro-patterns comprising one or more recesses and protrusions with two adjacent recesses being
3 separated by a distance on an order of 150 μm .

Claim 12. (Cancelled)

1 13. (Currently Amended) A helical implant, comprising a core surrounded by helical
2 threads bearing inclined flanks ~~incised~~ disformed with ~~continuous~~ a continuum of micro-patterns
3 increasing exposed surface area of said implant by extending along said flanks and around said
4 core.

1 14. (Previously Presented) The helical implant as set forth in claim 13, comprised of the
2 micro-patterns having a polygonal cross-section opened at one side thereof.

1 15. (Previously Presented) A helical implant of claim 13, comprised of the micro-
2 patterns comprising one or more recesses and protrusions.

1 16. (Previously Presented) The helical implant as set forth in claim 13, comprised of the
2 micro-patterns comprising one or more recesses and protrusions with both the recesses and
3 protrusions having an arcuate cross section of identical curvature and length.

1 17. (Previously Presented) The helical implant as set forth in claim 13, comprised of the
2 micro-patterns comprising one or more recesses and protrusions with two adjacent recesses being
3 separated by a distance on an order of 150 μm .

Claim 18. (Cancelled)

1 19. (New) A helical implant, comprising:
2 a cylindrical core;
3 a screw thread surrounding the cylindrical core, with the screw thread comprising crests,
4 roots and flanks connecting the crests and the bottoms of the screw thread, and the flanks
5 comprising inclined planes surrounding the cylindrical core; and
6 at least one micro-pattern formed on the flanks of the screw thread, and extending
7 helically in a circumferential direction around the cylindrical core.

1 20. (New) The helical implant of claim 19, comprised of the micro-pattern having a
2 polygonal outline and opened at one side when viewed on a cross sectional plane of the screw
3 thread, and said cross sectional plane containing the longitudinal axis of the cylindrical core.

1 21. (New) The helical implant of claim 20, comprised of the distance between the
2 neighboring micro-patterns being 150 μm .

1 22. (New) The helical implant of claim 19, with said micro-pattern comprised of at least
2 one ridge formed on the flanks of the screw thread, and extending in the circumferential direction
3 surrounding the cylindrical core.

1 23. (New) The helical implant of claim 22, with said micro-pattern comprised of at least
2 one groove and at least one ridge having arcuate outlines and opened at one side when viewed on
3 a cross sectional plane of the screw thread, and said cross sectional plane containing the
4 longitudinal axis of the cylindrical core.

1 24. (New) The helical implant of claim 23, comprised of the distance between the
2 neighboring micro-patterns being 150 μm .